

速 報

On a New Species of *Coccidia* Parasitic in the
Gecko, *Gekko japonicus*

Hisakiti MATUBAYASI

*Parasitology Laboratory (Prof. M. KOIDZUMI)
Faculty of Medicine, Keio-Gijuku University*

On October 10, 1940, I happened to find out a species of *Eimeria* in the intestine of a gecko, *Gekko japonicus*. This gecko was caught in the institute and was kept alive in a glass dish for two days and was sacrificed and dissected. A large number of coccidial oöcysts was found in the contents of the intestine as well as in the faeces passed in the glass dish. The intestine was fixed *in toto* with Bourn's fluid to be used for sections.

The oöcyst is elongated ellipsoidal in shape with colourless, double-contoured wall and measures about 30μ in length and 14μ in breadth. The micropyle is not recognizable. The sporulation is completed in the intestine, and 4 sporocysts, each containing 2 sporozoites and a large sporocystic residue, are found in the oöcyst. No oöcystic residue is seen. The sporocyst is ellipsoid in shape with double-contoured wall and measures about 13μ in length and 9μ in breadth.

The endogenous cycle of development takes place in the epithelial cells of the intestine, schizonts and gametocytes being found in the distal portion or above the nucleus of the epithelial cells. The mature schizont contains 10~15 merozoites. The microgametocyte shows no special feature to be mentioned. The mature macrogamete has many darkly staining coarse granules in the cytoplasm.

TANABE¹⁾ (1928) reported a species of *Eimeria* from *Gekko japonicus* under the name of *Eimeria gekkonis*. The oöcyst of *E. gekkonis* is sub-spherical in shape measuring $17\sim 20\mu$ in length and $13\sim 15\mu$ in breadth. The sporulation takes place outside the host and requires more than 3 days to be completed in favourable conditions. These characteristics of the oöcyst make a striking difference between *E. gekkonis* and the species under consideration and the latter would be safely regarded as specifically distinct from the former. As regards the features of the endogenous cycle of development, no essential difference was recognized between both species. I propose to name this coccidia *Eimeria koidzumii* n. sp.

1) TANABE, M. (1928). *Eimeria gekkonis* n. sp., a new coccidium from the gecko, *Gekko japonicus* DUMÉRIEUX et BIBRON. Journ. Chosen Med. Ass. No. 87.

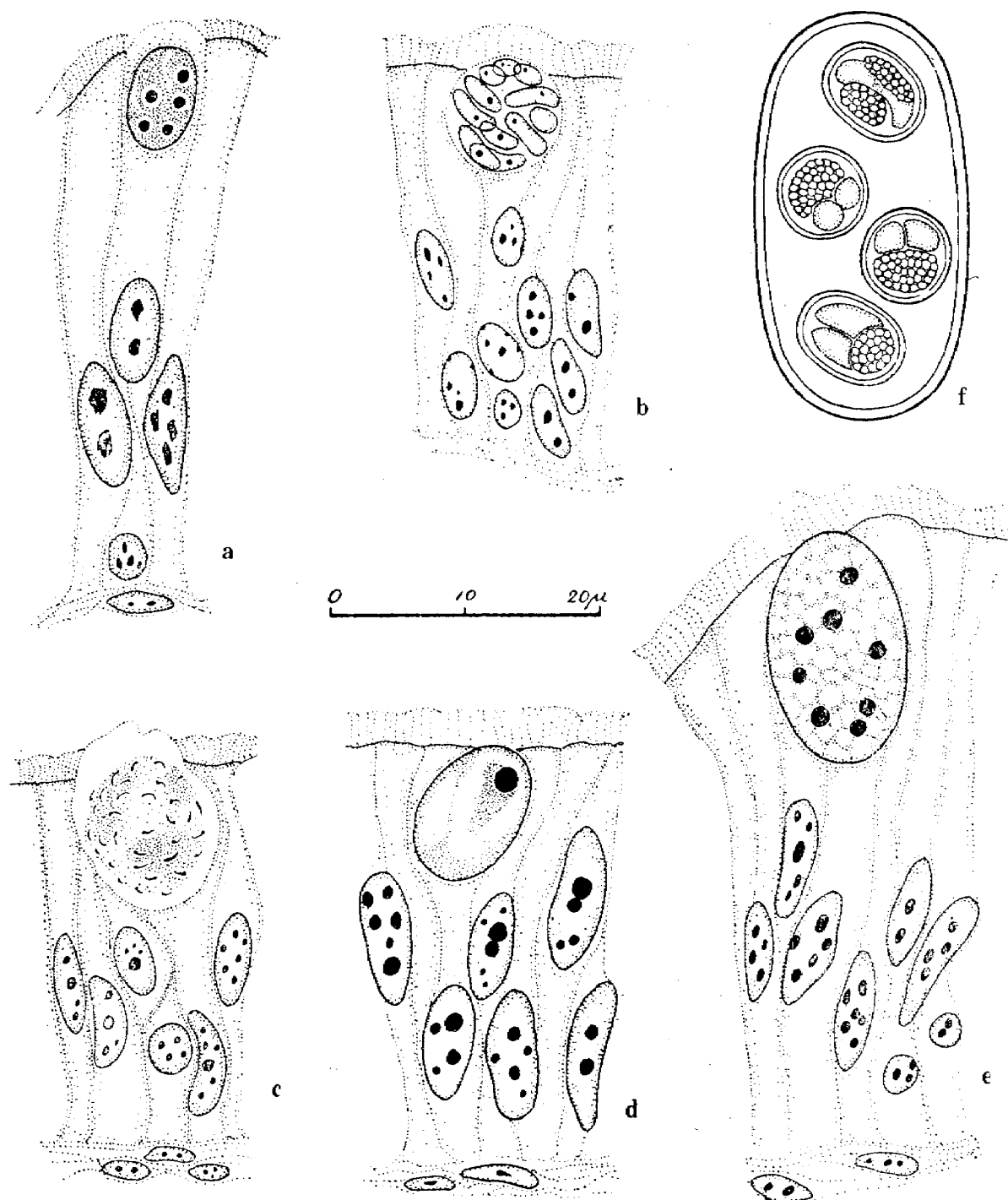


Fig. 1 a~e. Endogenous stages in the epithelial cells of the intestine (section preparations)

a: Young schizont having 5 nuclei. b: Mature schizont, 11 merozoites are discernible. c: Mature microgametocyte. d: Young macrogametocyte with a nucleus and vacuolated cytoplasm. e: Mature macrogamete with darkly staining granules in the cytoplasm. f: Oöcyst.

Diagnosis

Systematic position. *Eimeria koidzumii* (Coccidiida Eimeriidae).

Description. Oöcyst elongated ellipsoidal without micropyle: colourless: $30 \times 14 \mu$; sporocyst ellipsoid, contains a large sporocystic residue: $13 \times 9 \mu$; sporulated oöcysts discharged from host; oöcystic residue absent.

Habitat. Small intestine of *Gekko japonicus* (Lacertilia Gekkonidae).

Locality. Tokyo, Japan.